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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,417	12/22/2004	Patrick Cornelis Nicolaas Rensen	101137-60	7547

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NORRIS, MCLAUGHLIN & MARCUS, P.A.
875 THIRD AVE
18TH FLOOR
NEW YORK, NY 10022

EXAMINER
HINES, JANA A

ART UNIT	PAPER NUMBER
1645	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,417	RENSEN ET AL.	
	Examiner	Art Unit	
	Ja-Na Hines	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-26* is/are pending in the application.

4a) Of the above claim(s) *19 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-18 and 21-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) *12-26* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on August 29, 2007 is acknowledged.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Sequence Compliance

3. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. §§ 1.821-1.825 because the specification refers to sequences without sequence identifying numbers being recited within the specification itself. Therefore, appropriate correction is requested.

Claim Objections

4. Claims 23-26 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

a) Claims 23-26 fail to further limit the method of manufacture. Claims 23-26 fail to provide any active steps, which further describes the steps for manufacturing the pharmaceutical composition. Thus the claims are objected to and appropriate clarification is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 12-18 and 22-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a written description rejection.

Claim 12 is drawn to a pharmaceutical composition for preventing or treating sepsis or septic shock, which composition comprises a peptide floating therein, which method comprises the steps of which binds to a lipopolysaccharide (LPS) or lipoteichoic

acid (LTA) wherein the peptide comprises the amino acid sequence of apolipoprotein CI (apoCI) or a part thereof that comprises at least the amino acids of the C-terminal helix of apoCI as well as a pharmaceutically acceptable carrier.

The specification discloses SEQ ID NO:1 and 2 which meet the written description provision of 35 USC 112, first paragraph. However, the aforementioned claims are directed to encompass sequences that have a part thereof that comprises at least the amino acids of the C-terminal helix of apoCI. None of these parts meet the written description provision of 35 USC 112, first paragraph. The specification provides insufficient written description to support the genus encompassed by the claim. The written description in this case only sets forth specific sequences, therefore the written description is not commensurate in scope with the claims drawn to parts thereof. Neither the specification nor the claims teach how to define parts thereof. Neither the claims nor the specification teach how to obtain such parts. There is no guidance as to what the parts are; or what parts can or cannot be used in the complex being claimed. The specification does not include structural examples of parts thereof. Thus, the resulting part could result in a complex not taught and enabled by the specification.

Vas-Cath Inc. V. Mahurkar, 19 USPQ2d 1111, clearly states that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed*." (See page 1117). The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (*See Vas-Cath* at page 1116).

Applicant is reminded that *Vas-Cath* makes clear that the written description provision of 35 USC 112 is severable from its enablement provision (see page 115).

With the exception of specifically named sequences, the skilled artisan cannot envision the detailed structure of the parts thereof, thus conception is not achieved until reduction to practice has occurred, regardless of the complexity or simplicity of the method of isolation. An adequate description requires more than a mere statement that it is part of the invention and a reference to a potential method of isolating it. Furthermore, *In The Reagents of the University of California v. Eli Lilly* (43 USPQ2d 1398-1412), the court held that a generic statement which defines a genus of by only their functional activity does not provide an adequate description of the genus. The court indicated that while Applicants are not required to disclose every species encompassed by a genus, the description of a genus is achieved by the recitation of a representative number of molecules falling within the scope of the claimed genus.

Therefore only the recited sequences and not the full breadth of the claims meets the written description provision of 35 USC 112, first paragraph.

6. Claims 16-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This is an enablement rejection.

In this regard, the application disclosure and claims are compared per the factors indicated in the decision *In re Wands* 858 F.2d 731, 8 USPQ2nd 1400 (Fed. Cir,1988).

These factors are considered when determining whether there is sufficient evidence to support a description that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is undue. The factors include but are not limited to: (1) the nature of the invention; (2) the breath of the claims; (3) the predictability or unpredictability of the art; (4) the amount of direction or guidance presented; (5) the presence or absence of working examples; (6) the quantity of experimentation necessary; (7) the relative skill of those skilled in the art. Each factor is here addressed on the basis of a comparison of the disclosure, the claims, and the state of the prior art in the assessment of undue experimentation.

In re Fisher, 427 F.2d 833,839, 166 USPQ 18, 24 (CCPA 1970) states, "The amount of guidance or direction needed to enable the invention is inversely related to the amount of knowledge in the state of the art as well as the predictability in the art." "The "amount of guidance or direction" refers to that information in the application, as originally filed, that teaches exactly how to make or use the invention. The more that is known in the prior art about the nature of the invention, how to make, and how to use the invention, and the more predictable the art is, the less information needs to be explicitly stated in the specification. In contrast, if little is known in the prior art about the nature of the invention and the art is unpredictable, the specification would need more detail as to how to make and use the invention in order to be enabling" (MPEP 2164.03). The MPEP further states that physiological activity can be considered inherently unpredictable. Thus, Applicant assumes a certain burden in establishing that inventions involving physiological activity are enabled. All of the Wands factors have

been considered with regard to the instant claims, with the most relevant factors discussed below.

Nature of the invention: The instant claim is drawn to methods for treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis, wherein to the mammal an active amount is administered of a peptide wherein the peptide comprises the amino acid sequence of apolipoprotein CI or a part thereof that comprises at least the amino acids of the C-terminal helix of apoCI as well as a pharmaceutically acceptable carrier. Additional limitations include the that the mammal is a human or that the mammal is at increased risk of developing sepsis as a result of a surgical intervention or weakened immune system.

Breadth of the claims: The claims encompass methods of treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis, by administering the peptide comprises the amino acid sequence of apolipoprotein CI or a part thereof that comprises at least the amino acids of the C-terminal helix of apoCI as well as a pharmaceutically acceptable carrier.

Guidance of the specification/The existence of working examples: The specification provides working examples wherein a strongly significant relation was found to exist between the ApoCI level and the TNFα level in patients who during a heart operation with cardiopulmonary bypass developed endotoxemia, but not in patients who did not develop endotoxemia. There is no demonstration that strong

binding LPS by ApoCI is capable of treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis.

State of the art: The art has shown that ApoCI can be used to bind LPS, but has not shown that said binding is capable of treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis. Although many investigators have tried to develop vaccines or treatments based on the binding of LPS, it is well understood that the ability of an antigen to stimulate antibody production does not necessarily correlate with the ability of the antigen to stimulate an immune response capable of protecting a mammal from sepsis or septic shock. Furthermore, various clinical studies which administer a variety of LPS-binding peptides have failed to yield an effective approach for sepsis and septic shock. See the administration of apoA and apoE (WO 98/07751), apoAI (WO 99/16409), CAP18 (Larrick, 1994), CAP37 (US 6107460), CDI4 (WO 96/20956), prophenin (WO 95/34289; WO 95/26747), polyphemusin (WO 02/00687) and LALF protein (US 5747455).

Ellis (Chapter 29 of Vaccines, Plotkin, *et al.* (eds) WB Saunders, Philadelphia, 1988, especially p. 57 l, paragraph 2) exemplifies this problem in the recitation that "the key to the problem (of vaccine development) is the identification of that protein component of a virus or microbial pathogen that itself can elicit the production of protective antibodies.., and thus protect the host against attack by the pathogen." Moreover, protein chemistry is probably one of the most unpredictable areas of biotechnology. Consequently, the effects of sequence dissimilarities upon protein structure and function cannot be predicted. Bowie *et al.* (Science, 1990, 247:1306-1310)

teach that an amino acid sequence encodes a message that determines the shape and function of a protein and that it is the ability of these proteins to fold into unique three-dimensional structures that allows them to function, carry out the instructions of the genome and form immunoepitopes. Bowie et al., teach that the problem of predicting protein structure from sequence data and in turn utilizing predicted structural determinations to ascertain functional aspects of the protein is extremely complex. (column 1, page 1306). Bowie et al., further teach that while it is known that many amino acid substitutions are possible in any given protein, the position within the protein's sequence where such amino acid substitutions can be made with a reasonable expectation of maintaining function are limited. Certain positions in the sequence are critical to the three dimensional structure/function relationship and these regions can tolerate only conservative substitutions or no substitutions (column 2, page 1306). The specification fails to teach that any binding protein can produce a prophylactic response in the host. In view of the lack of support in the art and specification for an effective treatment using the claimed binding proteins, it would require undue experimentation on the part of the skilled artisan to make and use the method of prophylaxis as claimed; therefore the full scope of the claims is not enabled.

Applicant has not shown how to make the claimed pharmaceutical composition and the methods for treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis, wherein to the mammal an active amount is administered of a peptide wherein the peptide comprises the amino acid sequence of apolipoprotein CI or a part thereof that comprises at least the amino acids of the C-

terminal helix of apoCI as well as a pharmaceutically acceptable carrier will elicit the intended preventive immune response. Therefore, one of skill in the art would be unable to make the pharmaceutical composition and the methods for treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis, as claimed. Additionally, applicant has failed to demonstrate that the claimed pharmaceutical composition complex is effective in treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis. Therefore, in view of the lack of support in the art, the lack of working examples commensurate in scope to the claimed invention, and the unpredictability of the generation of protective immunity, the specification, as filed, does not provide enablement for the claimed pharmaceutical composition and methods.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 16 refers to an active amount, however it is unclear what an "active" amount is or how activation of the peptide affects administration. Therefore the suggested claim language for is "an effective amount" of the peptide.

8. Claims 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. All steps are to a method of manufacturing the pharmaceutical composition are completely missing. The step of using the peptide is not active step and fails to definite active steps. Furthermore the claims fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Thus, appropriate clarification is required to overcome the rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 12-15 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Quarfordt et al., J. of Biological Chem. 1982. Vol. 257(24): 14642-14647.

Claim 12 is drawn to a pharmaceutical composition for preventing or treating sepsis or septic shock, which composition comprises a peptide floating therein, which method comprises the steps of which binds to a LPS or LTA wherein the peptide comprises the amino acid sequence of apoCI or a part thereof that comprises at least the amino acids of the C-terminal helix of apoCI as well as a pharmaceutically acceptable carrier. Claim 13 is drawn to the peptide comprises the amino acid

sequence of human apoCI or a part thereof that comprises at least the amino acids of the C-terminal helix of human apoCI. Claim 14 is drawn to the peptide being human apoCI or a fragment thereof that comprises at least the amino acids MREWFSETFQKVKEKLK. Claim 15 is drawn to the peptide is human apoCI having the amino acid sequence TPDVSSALDKLKEFGNTLEDKARELISRIKQSELSAKMREWFSETFQKVKEKLKIDS. Claim 21 is drawn to a method of manufacturing a pharmaceutical composition, comprising using a peptide according to claim 12. Claim 22 is drawn to the peptide binding to lipoteichoic acids and wherein the composition is for preventing or treating a sepsis or septic shock in mammals. Claim 23 is drawn to the shock being caused by Gram-negative bacteria. Claim 24 is drawn to the mammal being a human, horse, cow, dog or cat. Claim 25 is drawn to the shock being caused by the shock is caused by Gram-positive bacteria. Claim 26 is drawn to the mammal being a mammal is a human, horse, cow, dog or cat.

Quarfordt et al., teach purifying human apolipoprotein CI (apoCI) (page 14642, col.2). Quarfordt et al., teach preparations of pharmaceutical compositions comprising triglyceride emulsions having ApoCI (page 14643, col.1). Quarfordt et al., teach administering the composition of ApoCI to rats. Table I shows the injected activity of ApoCI (page 14644, col.1). Quarfordt et al., teach the C apolipoproteins were active within emulsions supplemented with apolipoprotein E (page 14646, col. 1). Quarfordt et al., teach ApoCI having the sequences of claims 14-15.

The instant claims are drawn to the peptide comprises the amino acid sequence of human apoCI, just as the teaching of Quarfordt et al. Therefore the pharmaceutical composition of Lauer et al., comprising human apoCI is the same as the human ApoCI instantly claimed. Thus, the compositions are not patentably distinct from the other. Furthermore the product-by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Since the Patent Office does not have the facilities for examining and comparing applicants' peptide with the peptide of the prior art reference, the burden is upon the applicants to show an unobvious distinction between the material structural and functional characteristics of the claimed peptide of the prior art. See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

Therefore Quarfordt et al., teach the instant claims.

10. Claims 12-15 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Lauer et al., (J. Biol. Chem. 1988. Vol. 263(15): 7277-7286).

Claim 12 is drawn to a pharmaceutical composition for preventing or treating sepsis or septic shock, which composition comprises a peptide floating therein, which method comprises the steps of which binds to a LPS or LTA wherein the peptide comprises the amino acid sequence of apoCI or a part thereof that comprises at least the amino acids of the C-terminal helix of apoCI as well as a pharmaceutically acceptable carrier. Claim 13 is drawn to the peptide comprises the amino acid sequence of human apoCI or a part thereof that comprises at least the amino acids of

the C-terminal helix of human apoCI. Claim 14 is drawn to the peptide being human apoCI or a fragment thereof that comprises at least the amino acids MREWFSETFQKVKEKLK. Claim 15 is drawn to the peptide is human apoCI having the amino acid sequence TPDVSSALDKLKEFGNTLEDKARELISRIKQSELSAKMREWFSETFQKVKEKLKIDS. Claim 21 is drawn to a method of manufacturing a pharmaceutical composition, comprising using a peptide according to claim 12. Claim 22 is drawn to the peptide binding to lipoteichoic acids and wherein the composition is for preventing or treating a sepsis or septic shock in mammals. Claim 23 is drawn to the shock being caused by Gram-negative bacteria. Claim 24 is drawn to the mammal being a human, horse, cow, dog or cat. Claim 25 is drawn to the shock being caused by the shock is caused by Gram-positive bacteria. Claim 26 is drawn to the mammal being a mammal is a human, horse, cow, dog or cat.

Lauer et al., teach that ApoCI is found in plasma and may be associated with chylomicrons and lipoproteins (page 7277, col.2). Lauer et al., teach the nucleotide and amino acid sequences of apoCI. Lauer et al., teach the ApoCI having 100% sequence identity to the sequences of claims 14-15. Lauer et al., teach that the ApoCI peptide is expressed in the liver (page 7277, col.1).

The instant claims are drawn to the peptide comprises the amino acid sequence of human apoCI, just as the teaching of Lauer et al. Therefore the pharmaceutical composition of Lauer et al., comprising human apoCI is the same as the human ApoCI instantly claimed. Thus, the compositions are not patentably distinct from the other.

Furthermore the product-by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Since the Patent Office does not have the facilities for examining and comparing applicants' peptide with the peptide of the prior art reference, the burden is upon the applicants to show an unobvious distinction between the material structural and functional characteristics of the claimed peptide of the prior art. See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

Therefore Lauer et al., teach the instant claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosten et al., (J. of Biol. Chem. 2001. Vol. 276(23): 8820-8824); and Lauer et al., (J. Biol. Chem. 1988. Vol. 263(15): 7277-7286) in view of Quarfordt et al., (J. of Biological Chem. 1982. Vol. 257(24): 14642-14647).

Claim 16 is drawn to a method for treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis, wherein to the mammal an active amount is administered of a peptide. Claim 17 is drawn to a method wherein

the mammal is a human. Claim 18 is drawn to wherein the mammal is at increased risk of developing sepsis as a result of a surgical intervention or a weakened immune system.

Oosten et al., teach that apoE may be used therapeutically to protect against LPS-induced endotoxemia as known as sepsis (page 8820). Oosten et al., teach lipopolysaccarides (LPS) are a component of gram-negative bacteria which is the primary cause of gram-negative sepsis (page 8820, col. 1). Oosten et al., teach that all lipoproteins bind endotoxins and that combining lipoproteins or chylomicrons with LPS before administration to rodents protects against endotoxin induced death (page 8820, col.2). Oosten et al., teach emulsion models for chylomicrons target LPS and prevent the further binding of LPS, thereby showing the importance of the lipoprotein-endotoxin interactions (page 8821, col.1). Oosten et al., teach administering emulsions having apoE to mammals (page 8821, col1). However Oosten et al, do not teach administering ApoCI.

Lauer et al., teach that human apolipoprotein CI is closely linked to Apolioprotein E (page 7277).

Quarfordt et al., teach purifying human apolipoprotein CI (apoCI) (page 14642, col.2). Quarfordt et al., teach preparations of chylomicron or emulsion models (page 14642, col.2). Quarfordt et al., teach emulsions comprising ApoE and ApoCI (page 14643, col.1). Quarfordt et al., teach administering ApoCI to rats. Table I shows the injected activity of ApoCI (page 14644, col.1). Quarfordt et al., teach the C

apolipoproteins were active within emulsions supplemented with apolipoprotein E (page 14646, col. 1).

Therefore it would have been prima facie obvious at the time of applicants' invention to apply the pharmaceutical emulsion composition comprising ApoE and ApoCI as taught by Quarfordt to the method for treating or preventively treating a mammal, which suffers from or is at increased risk of developing sepsis, as taught by Oosten et al., in order to therapeutically to protect against LPS-induced endotoxemia as known as sepsis. One of ordinary skill in the art would have a reasonable expectation of success by including ApoCI within the composition of method of treatment because human ApoCI is closely linked to ApoE. Furthermore, ApoCI and ApoE are known to produced in emulsion chylomicron compositions; and Oosten et al., teach that emulsion chylomicron compositions target LPS and prevent the further binding of LPS. Furthermore, no more than routine skill would have been required to include the closely linked ApoCI with the emulsions comprising ApoE when Oosten et al., teach that all combining chylomicrons with LPS before administration protects against endotoxin death.

Conclusion

12. No claims allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ja-Na Hines whose telephone number is 571-272-0859. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Shanon Foley, can be reached on 571-272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ja-Na Hines
November 12, 2007

MARK NAVARRO
PRIMARY EXAMINER